

**Desert Landscape Conservation Cooperative (DLCC)  
Joint Steering Committee and Science Working Group Meeting  
October 10-12, 2012  
El Paso, Texas**

**Draft Meeting Summary**

**Participants**

Please see Appendix A for a list of participants.

**Objectives**

- Review 2012 accomplishments, including funded projects and other action plan items
- Discuss the unique role of the Desert LCC and vision for the partnership in 2013
- Develop and agree to a Desert LCC action plan for 2013, including tasks, timelines, and deliverables associated with the four LCC goals
- Review National LCC items and identify next steps for how to better engage, review and report on national items
- Select a new Vice Chair for the Desert LCC
- Partner presentations to learn about related activities in the Desert LCC geographic area and inform discussions of the unique value of the Desert LCC and its 2013 vision

**Outcomes and Consensus Agreements**

- **Vice Chair:** The group confirmed Armand Gonzalez for the next Vice Chair of the DLCC and Duane Pool rotated to the Chair position.
- **2013 Action Plan:**
  - The Steering Committee members agreed via consensus to the general direction of the DLCC 2013 action plan as described in the draft that was shared on day 3 of the meeting (see Appendix C). The plan was produced through breakout groups that provided prioritized task recommendations for each of the DLCC goal areas, followed by full group discussion of the overall plan.
  - The Steering Committee agreed that the Coordinators will further refine the action plan and present it back to the Steering Committee within 2 weeks.
  - The Steering Committee specifically identified the need to establish new working groups and task forces, with the following volunteers.
    - Data Cataloging task force: Three months to outline process. Louise Misztal, Fon Duke, and the coordinators will work together; may also draw from existing Science and GIS/Data working group members.
    - Education/Outreach Working Group: John Stewart, Sonoran JV staff (Robert Mesta will provide)
      - State Agencies subcommittee for in-reach within state: Genevieve Johnson will give Scott Boruff a call to confirm he will lead the group.
      - Conservation Planning subcommittee – to provide expertise and guidance for the EL Paso Conservation Cooperative
- **Communications:**
  - The Steering Committee agreed to the use of a share point site for sharing and archiving documents.

- The Steering Committee asked Genevieve to provide to the Committee at her discretion updates on National LCC activities that she thinks the group needs to be aware of or make decisions on.
- The Steering Committee recommended that the coordinators continue to email information as they see fit, but include specific subject lines in emails to the Committee so they can understand the content as well as whether the email is an update, a decision item, etc.
- The Steering Committee recommended utilizing face-to-face meeting time for working meetings and having short briefings on research and working groups. Working group updates and research updates can be provided on conference calls that are separate from calls focused on decision items. Briefing papers can be used for those who want to dive deeper in to the work of a specific working group or into specific research topics.

### **Action Items and Next Steps**

- Using the feedback from the final day of the meeting, the coordinators will refine the action plan with details on timelines, who/how, and resources; it will be shared back with the Steering Committee in two weeks and finalized by email unless there is a need for further discussion.
- The coordinators will help initiate new task forces and working groups described above.
- Armand Gonzalez offered to have staff help with the creation of a logo.
- The process for the finalizing the Science Working Group's revised charter will be completed through email.
- Action items from presentations:
  - Carol Beardmore will follow up to determine the boundaries that were considered for the vulnerability assessment and whether or not groundwater and underground aquifers were considered.
  - Robert Mesta will discuss marine boundaries in the next Mexico subcommittee meeting.
  - Bureau of Land Management (Julie Decker) will keep the Steering Committee informed of any and all workshops regarding the REAs.
  - Paul Miller will provide the group with website information as well as a contact name for a colleague more able to answer the question about water use accounted for in solar energy.
  - For future discussion: DLCC representation in CSC science working groups.
  - Mark Sogge volunteered to check on the details of attributes and coverage for the USGS project to craft a protected area map

### **Next Meeting**

- There will be a quarterly call in January which will include planning for the spring meeting including structure, participation, and what will be on the agenda. The Steering Committee will discuss whether/when a future joint meeting of the combined Steering Committee and Science Working Group is needed.
- There will be an in person meeting in the spring, hosted in California. Russell Scofield and Armand Gonzalez will help coordinate.

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### **Day 1 (October 10, 2012)**

#### **Welcome, introductions, and agenda review**

Opening remarks were given by Larry Voyles and Duane Poole (Chair and Vice Chair of the DLCC) who welcomed the group, reviewed meeting outcomes, goals, objectives, and discussed the shift of chair/vice chair roles in the DLCC. Genevieve Johnson, DLCC Coordinator, noted that this was the first joint meeting of the Science and Steering Committees. Dana Roth introduced Aimee Roberson, the DLCC Science Coordinator, who then gave her background and introduced herself to those in attendance. The facilitator, Julie Shapiro from The Keystone Center, reviewed the agenda and guidelines.

### **Confirmation of new DLCC Vice Chair**

The Steering Committee reviewed the process of the nomination of Armand Gonzalez for Vice Chair of the DLCC. The group discussed the importance of the Chair having a physical presence at the meetings and was reassured that with this position, it is expected that exceptions will be made to Armand's travel restrictions. A call for consensus regarding the nomination was made and consensus was reached. As laid out in the governance document, Duane Pool has assumed the position of Chair.

***Agreement: The group reached consensus and agreed to the nomination of Armand Gonzalez for the next Vice Chair of the DLCC.***

### **Review of 2012 accomplishments**

#### Report on action plan accomplishments and 2012 activities (Genevieve Johnson and Carol Beardmore/Aimee Roberson)

- Please see the presentation for further detail.
- After the presentation, there was an opportunity to ask questions. Several members took the opportunity to do so and it was apparent there were the following themes identified as 2013 planning ideas:
  - Partner presentations – monitoring and programs
  - Consider all deserts, rivers, mountains and geographies in the DLCC
  - Think about 2014 tasks as well as the timing for future planning

#### Nature Serve Plant Community Vulnerability Assessment (Carol Beardmore)

- Please see the presentation for further detail.
- The discussion following the presentation included:
  - The boundaries that were considered and whether or not groundwater and underground aquifers were considered. Carol Beardmore committed to following up on this question.
  - A member felt that the DLCC has a great opportunity to be a cutting edge organization with the ability to integrate different fields and to encourage where resources are allocated to contribute toward on-the-ground work on landscape-scale stressors.
  - The peer review has not occurred at this time but will in the near future and will be posted on the website as well. Any suggestions on peer review would be welcomed.
- There was an opportunity to ask questions. Through the questions asked, the following themes were identified as 2013 planning opportunities:
  - Look for opportunities to integrate across DLCC expertise, e.g. speaking a “common language.”
  - Partner identified data gaps can inform DLCC science; DLCC can inform other process to ensure products are useful to partners... e.g., the BLM – Rapid Ecoregional Assessment and the BOR Basin Studies.
  - Contribute to Protected Areas Database.

***Action Item: Carol Beardmore will follow up to determine the boundaries that were considered for the***

**vulnerability assessment and whether or not groundwater and underground aquifers were considered.**

**Update on projects funded by BOR 2011 and 2012 RFPs (Seshu Vaddey)**

- Please see the presentation for further detail.
- The discussion following the presentation included:
  - There are steps being taken to reduce the likelihood of repeating work that has been previously completed.
  - A meeting attendee urged the DLCC to consider a method to determine what is needed for concept ideas and hoped part of these meetings can help to narrow the focus even more, to provide the ability to be more strategic and this could be achieved via the FOAs.
- Through questions and discussion, the following themes were identified as 2013 planning opportunities:
  - Webinar on vulnerability assessment
  - Communications – Share point site use for information on projects
  - Invite presentations from completed projects for the next Steering Committee meetings and also through webinars for broader audiences
  - How to avoid duplication of data/research – BLM Cross Walk program (recurring at national level with multiple partners)

**Sky Islands Alliance 2011 project update (Louise Mistzal)**

- Please see the presentation for further detail.
- The discussion following the presentation included:
  - The project was not designed using the BLM protocols but use protocols very similar to the Desert Research Institute protocols. While the project was started with the intent to look at historical data, it was found the existing data was very lacking. Currently, the project is looking at how things have changed to date. Given the short timeframe of the project, the field work was done without consideration of seasonality.
  - With adequate funding, the project will likely expand east and south, into Mexico. A member suggested the data may be enhanced if the next step was to get the data into the USGS database.
  - Springs on private lands are approached initially by talking to the specific land owner and issues with water rights are covered within the “administrative context” portion of the project summary.

**Desert LCC Related Projects Funded by Partners**

**USFWS (Dana Roth)**

- An update on the projects funded was given, please see handout.
- It is important for the group to realize it has the potential to leverage funds. For one of the projects funded, the group had an initial \$50,000 for a project that was leveraged into almost \$400,000 for a region-wide, bi-national project.

**Desert Managers Group (Russell Scofield)**

- Russell Scofield reviewed several projects including:
  - A study, largely funded by BLM, dealing with landscape genetics to identify hotspots of diversity regarding 15 different species in the Mojave eco-region, Lower Colorado Desert and also into the balance of the Sonoran Desert.
  - A project regarding the Mojave Ground Squirrel which utilizes camera trapping and could be a good opportunity for the DLCC to leverage camera tracking technology.

- A development project of a three dimensional water measurement technology from Death Valley to Nevada which is looking at the rate of evaporation and the impact on vegetation.

#### USGS (Mark Sogge via phone)

- Mark Sogge informed the group that DLCC science needs were sent around to USGS Science Centers. Scientists submitted a series of project proposals, three of which were funded (for approximately \$130,000) by the USGS Regional Director, including:
  - Digitizing existing climate data for the Navajo Nation
  - Mapping the protected areas in the DLCC to create a seamless map
  - Determining how climate and landscape changes may affect wildlife corridors
- The discussion after the update is summarized below:
  - It is important to develop accurate attributions of the protected areas (and if/how the systems are different from the USA to Mexico) and to develop better maps as to what is being done against the science priorities.
  - There are specific things done within these projects directly related to the DLCC science needs.
  - It is helpful to evaluate and link the project to the goal and the task.
  - ACTION: Mark Sogge volunteered to check on the details of attributes and coverage for the protected area map project

### **National LCC Updates & Discussion**

#### National LCC vision/mission/ charter

- Please see handout for further detail.
- The vision/mission/charter was adopted by the LCC network (including the 22 coordinators, science coordinators, national coordinator and vice coordinator) in March 2012 at the Denver meeting.

#### National LCC projects funded

- Specific funded projects were determined after an application review committee selected and ranked projects; the projects included multiple partner agencies from across network. While this process was effective for this year, it will be reconsidered and refined as needed for upcoming years. There were 62 proposals and five projects selected.
- There is not currently an effort underway to build a master national LCC database, though many LCCs are talking to each other about database platforms. A member felt it would be advantageous if there was and Genevieve Johnson will bring the feedback to the group at its next meeting. All of the LCCs start independently and have been formed at their own times.
- It was noted that the national level group was formed secondary to the individual LCCs. At the initial formation of the LCCs there were comparisons to Joint Ventures, however LCCs do not have a national plan nor national organic legislation and are without the strong funding mechanism of JVs, however, they have a vision for a landscape-scale collaborative approach.

#### Marine Boundaries

- Several of the LCCs have marine areas and in order to do work in the water boundaries, there was interest in broadening their geographic range. The DLCC does contain a marine area which is wholly within Mexico (the Sea of Cortez). The option to work within the marine areas was adopted by the national network; unless a Steering Committee chooses to not extend the boundary, by default, it is assumed to now include marine boundaries which allows for funding of work in these areas.
- A member felt that the default option regarding marine boundaries is at odds with each LCC being a self-directed entity. This discussion will be continued offline.

- When discussing marine boundaries, it is important to consider the implications in further engaging Mexico. Considering the most endangered saltwater fish is in the region and the LCC's desire for more participation from Mexico; it was suggested that it would be best to let Mexican partners make the decision regarding work within marine boundaries. Robert Mesta will bring this up in the next Mexico subcommittee.

***Next Step: Robert Mesta will discuss marine boundaries in the next Mexico subcommittee meeting.***

#### Conservation Targets white paper

- Currently there is a National LCC working group developing a white paper to provide some information, options, and frameworks on what conservation targets could be and how they could be used consistently to provide a national seamless LCC network. A draft has been received by the network and will be discussed at the next meeting.
- It is important to note, all documentation coming out of the network include non-prescriptive language.

#### National LCC Council proposal

- There is a September 2012 update paper. Please see the handout for further detail.
- If anyone has ideas, comments, or questions please submit to Genevieve Johnson via email so she can relay them to the national group.
- The positive goal is to develop a national level constituency which is really important for the persistence of the LCCs and for helping to discuss and address issues that are common to LCCs.

#### Performance Metrics

- There is a National LCC working group that has just started, dedicated to performance metrics. It will likely be six months to a year before there is anything concrete.

#### Activities of other LCCs

- The group received a handout compiling highlights of the LCC. Many of the highlights are dealing with strategic planning, identifying conservation themes, strategic frameworks, and identifying science needs.

#### **Large-scale partner activities: examples of related activities in the Desert LCC that can serve as contexts for future LCC activities**

#### CSC Update

- Both the Southwest Climate Science Center (SWCSC) and the South Central Climate Science Center (SCCSC) have hired new directors and both should be permanently staffed and moving forward. There is a roll out meeting scheduled for October 24, 2012. Additionally, their science needs were identified directly from the LCC science needs. There is a draft plan and they will take feedback until October 15, 2012.
- In November, the SWCSC has a research team meeting to further identify the strategic plan for science needs.
- A member urged the group to consider, as future business, that the DLCC will need to provide representation for the science groups in the CSCs.

#### BLM Rapid Ecoregional Assessments (REA)



- As many of the REAs come to completion, BLM is looking toward next steps. The REAs only took assessments of the current data and the initial management questions; it is not about getting work done on the ground. The REAs come to the LCCs seeking support and to see if there is traction to carry forward.
- The group requested notification of any and all workshops in regards to the REAs.
- The models used by the REAs are very transparent and well documented. These may be a good tool for the LCC. It would be helpful to have the LCC GIS/Data group reach out and connect.

***Next Step: To keep the Steering Committee informed of any and all workshops regarding the REAs.***

#### USFWS Surrogate Species (Dana Roth)

- See presentation for further detail.
- The group was given an opportunity to ask questions; responses are summarized below.
  - There is a 10-step outline in the draft guidance. Once it is finished, there is a 6-month timeline to finish the steps.
  - The idea is for the program foster collaboration.
  - The program will involve robust monitoring which will help species to be calibrated correctly.
  - The process will contribute to FWS' use of the adaptive management process and allows it to delve deeper with a few species that will represent other species.
  - Regardless of which species are selected as surrogate species, FWS will still maintain obligations associated with listed species.

#### WGA Habitat Corridors (Esther Rubin)

- Please see presentation for further detail.
- The discussion following is summarized below:
  - The WGA habitat corridor continues to take into consideration populations and transportation. The construct was that a geospatial tool capability would be created to provide information about wildlife so that visually you could process and understand lots of information.
  - The Habimap tool identifies various layers for species and connectivity and inhabited parcels. For the first time, we have integrated species of concern from the perspective of the state and wildlife habitat.
  - The scale for the data layers is determined by what is available. There is not "a" scale; there are hundreds embedded in it.

#### BOR Basin Studies (Paul Miller)

- Please see presentation for further detail.
- Summary of discussion:
  - The usage versus the flow data are published, showing the natural flow back to 100 years.
  - Projections for water usage were produced by precipitation and temperature that was downscaled to the regional size and then used a model to create 112 projections for hydrology.
  - Paul Miller will provide the group with website information as well as a contact name for a colleague more able to answer the question about water use accounted for in solar energy.
  - It was suggested that the entities at the table need to create a common language for the LCC to work from in order to have discussions and find elegant solutions.

***Action Item: Paul Miller will provide the group with website information as well as a contact name for***

*a colleague more able to answer the question about water use accounted for in solar energy.*

USFS Climate Change Scorecard & Planning (Bob Davis)

- See presentation for further detail.
- The discussion period was very brief as the day was coming to a close; discussion is summarized as follows:
  - When doing the climate change assessments, USFS is currently focusing on change that has already been observed.
  - There should be more communication and collaboration with others both inside the LCC boundaries and crossing the boundaries.

**Throughout the day's presentations and discussions, the group brainstormed the following ideas/opportunities for 2013 Planning:**

- Partner presentations – monitoring AND programs
- Consider all deserts, rivers, mountains and geographies in the DLCC
- Think about 2014 tasks as well (even as thinking about 2013) as the timing for future planning
- Look for opportunities to integrate across DLCC expertise
  - Transitioning water conservation
  - Speaking “common language”
- Partner identified data gaps can inform DLCC science; DLCC can inform other process to ensure products are useful to partners
  - BLM – REA
  - Basin Studies
- Contribute to Protected areas database
- Webinar on vulnerability assessment
- Communications – Share point site
- Invite presentations from completed projects for the next steering committee meetings and also through webinars for broader audiences
- How to avoid duplication of data/research – BLM Cross walk program (recurring at national level with multiple partners)
- Provide topics to researchers that meet for focused science needs
- Integrate partners needs with LCC needs – increase capacity – linking funded projects to comprehensive science needs
- Map work of partners against science needs and share
- Present “major” projects that have LCC impact
  - Can use JV process
- How to interact with national LCC discussions
- Framework for data synchronization/standardized methodologies for gathering special data across jurisdictional boundaries
- Communications, coordination across efforts and LCC

**Day 2 (October 11, 2012)**

**Welcome and agenda review**

Duane Pool, Chair of the DLCC, welcomed the group back and informed the group that the session today would be high on participation and urged all to participate. Julie Shapiro, the facilitator, reviewed the agenda and the anticipated flow of the day.



## Discussion of DLCC short-term vision

The facilitator posed the following question to the group, starting with the Steering Committee: What do you consider to be the value of the DLCC to your organization/entity? Steering Committee responses are summarized below - *these are brainstormed and synthesized ideas/concepts/themes rather than recommendations or agreements:*

- VALUES of the DLCC:
  - Tangible, baseline products
  - Applicable science delivery to managers
  - Whole LCC landscape – functioning ecosystems
  - Integration of disciplines
  - Integration of work of other initiatives – clearing house
  - Facilitate collaboration including public/private partnerships
  - Develop science and monitoring
  - Creation vs. Integration
- All participants were then given the opportunity to comment on the discussion above. Participants discussed:
  - Hope that the DLCC could improve the role of the science-management interface and could work to define the process. This would not be mutually exclusive from doing new science.
  - Monitoring is an important aspect of science work and also one of the quickest to get cut in budgets when there are financial constraints. A citizen monitoring effort could save science research money and could form alliances in public/private partnerships which in turn could help facilitate projects.
- The group was tasked with discussing in more detail the Goals of the DLCC (Science Development and Delivery, Collaboration and Communication, Monitoring and Evaluation, and Outreach and Education). This was the foundation step for the session in the afternoon meeting, providing an opportunity for all participants to reflect on the goal and its meaning for the DLCC. The group had discussions related to each, and comments were captured on flipcharts to summarize key themes, questions, and opportunities. The following text capture the brainstorming for each goal area – *these are brainstormed ideas/opportunities/concepts/themes rather than recommendations or agreements:*
  - Education and Outreach
    - Who are the target audiences?
    - Youth (classroom/agency programs)
    - County commissioners
    - Utilities
    - Citizen science
    - Managers
    - Put forward new science ideas
    - Three tiered process: political, administrative, public
  - Monitoring and Evaluation
    - Different kinds: phenological, migration, climate, hydrological, distribution, weather, etc.
    - Can provide “alarms”
    - Can provide feedback on program effectiveness
    - Need collaboration across programs (coordination)
    - Creation vs. integration of monitoring programs
    - Find common issues across regions (similarities for standardization)
    - Assessment of monitoring programs
    - Standards for collection
    - Informed by: vulnerability assessments and administrative priorities

- Need to utilize data/make available
- Determine effectiveness/interpretation for monitoring results
- Include private land owner
- Steps: Inventory, assessment, management, monitoring
- Science Development and Delivery
  - Comprehensive Assessment is a start (prioritize further)
  - Decision support tool (what is needed)
    - Need specific input on science that is needed/tools that are needed (Example: recreation noise impact)
    - Link to Western Governors Association Chat
    - Help identify condition and action
  - Synthesis of current science
  - Down scaling methodologies
  - Source, sink, survivability
  - Expand vulnerability assessment for plants and animals – whole LCC
  - Climate impacts on springs
  - Balance specific questions with broad application for partners
  - “Translation” of data across disciplines
  - Science Delivery from scientists to managers. E.G.: summits of targeted issue talks
- Collaboration and Communication
  - Technical guidance to private landowners
  - Larger scale collaboration
    - cataloguing existing efforts (science on the ground)
    - catalogue the science; reach to universities and others in DLCC
    - online database of science needs
    - reach to universities and others in DLCC
  - Technology transfer (webinar, symposia, Science Roundtables, etc.)
  - Information sharing across partner
  - Map comprehensive priorities to what is being done; gap analysis (link back to management needs)

## Development of 2013 Action Plan

The group divided into smaller breakout groups to refine priorities for a 2013 action plan; there were 5 breakout groups – one for each DLCC goal and a fifth focused on the Local Governments Working Group. Each breakout group reviewed task ideas that had been prepared by the coordinators and working groups, along with new ideas that were provided by participants. They then prioritized the task ideas and worked to identify mechanisms for implementation of these ideas. The full list of tasks considered by each breakout group is found in Appendix B. The detailed results can be found on the 2013 Action Plan attached to this summary.

### ***The Science Development and Delivery breakout group reported on eight priority recommendations for 2013:***

1. 3(a)-2013: add to comprehensive science needs – work with resource managers and larger DLCC partnership to identify information needed for managing lands and resources
2. 2013: Prioritize science needs/conservation priorities
3. 2(b)2013 (define approach); 2014 (Implement): inventory of best available science, data, tools that address a priority science need and respond to identified management questions

4. On-going after priorities are identified: Convert science inventories into synthesis products/meta-analysis of 2(b)
5. 2014 (start framework in 2013?): Strategic planning identify desired outcomes of different partners and how to achieve
6. On-Going: Factsheets on priority issues
7. 2013: Develop capacity/strategy for priority terrestrial needs
8. 2013: Down-scaled bi-national climate data/projections

During discussion, the following items were clarified:

- There are priorities that were already underway and were not included on this list – e.g., the Roundtables
- The other working groups may be working on some of these items as well – e.g., tribal and Mexico outreach
- Some of the priorities could be a product of the Roundtable
- Use caution when defining conservation in terms of population targets for state entities; clarify that the intent of the activity is to understand the targets of partners and how to support them.

A full list of the tasks considered by the breakout group is included in Appendix B.

***The Collaboration and Communication breakout group reported on six priority recommendations for 2013:***

1. Develop process and framework for cataloguing information – science needs database
2. Catalogue information and understand how terms are used throughout the partnership
3. Need to develop a point of contact list, have SC members and SWG members, who are we supposed to contact in your agencies. Not person but the position; creating a geographic representation of what this is
4. Considered specificity of tasks, being able to help facilitate needs ex: Dona Ana. This can be a service of the LCC, not necessarily the role Steering Committee rather agencies can give a reference point within their organization; would be reactive based on needs of group coming forward
5. State agencies could host an in-service meeting that would allow a certain geographic meeting to come and find out what is going on with the LCC (Scott Boruff offered to take on first meeting. Sub group: strategize, communicate and produce the meetings)
6. Convert existing science needs database into a useable and accessible format for a broader audience (related to cataloguing)

A full list of the tasks considered by the breakout group is included in Appendix B.

***Action Item: Scott Boruff offered to take on first in-service meeting hosted by state agencies meeting, including a sub group to strategize, communicate and produce the meetings***

***The Monitoring and Evaluation breakout group reported on nine priority recommendations that would unfold in sequence, with the first 2 identified as feasible for 2013:***

1. Compile list of existing monitoring programs, target, protocols, etc. (2013)
2. Identify management needs and other science monitoring needs, such as from V.A.s analyze with #1 (2013)
3. Identify gaps between needs and existing programs

4. Establish on-line network for available monitoring programs and data
5. Work with Barry M. Goldwater Refuge on camera traps (DOD is working on this)
6. Evaluate and synthesize monitoring programs
7. Identify central storage and databases and websites (Gen Bands, AKN, NOAA and link to DLCC website)
8. Same as #6 – for storage, databases, and websites
9. Prioritize data needs, data types

During discussion, the following items were clarified:

- In order to determine trigger points, the DLCC would need to first establish monitoring programs. It would be beneficial to check into other monitoring efforts and consider offering frameworks for how to identify trigger points.
- If the group is considering including private lands in monitoring it is important to include the term “voluntary” in the priority.

A full list of the tasks considered by the breakout group is included in Appendix B.

***The Outreach and Education breakout group reported on six priority recommendations for 2013:***

1. Communication Tools - Assess existing tools and methods (e.g. websites); identify additional tools/methods
  - a. Web presence – stand alone, independent web page for DLCC (not agency web page)
  - b. Social Media
  - c. Media for two-way communication
  - d. Look at design and expansion of current website as a key tool to convey information
2. Communicate existing knowledge existing research, new tools/accomplishments to relevant audiences
3. Publish new research articles, funding opportunities etc. (clearing house, archives webinars) annual accomplishments report
4. Develop suite of outreach tools to brand, showcase and promote the DLCC (bi-lingual) - Special audiences, outreach and education:
  - a. Mexican partners
  - b. Tribes
  - c. Private/federal/state
  - d. Congressional/Legislative/“political”
  - e. Public
5. As needed, provide synopsis of scientific information for public/broad audience
6. Utilize partner capacity to optimize outreach and education

During discussion, the following items were discussed and/or clarified:

- The group recommended the creation of an outreach/education working group and a completed communication plan including objective.
- It was recommended that there be a rewrite of the Strategic Action (Goal #4) to read: “Develop a suite of communication tools for local, state, federal, private, tribal and international land managers/owners to provide and receive information about landscape-level resource issues (e.g.: climate change, wildlife, water) within the DLCC and about the DLCC and its partners.”
  - In order to change this, it would need to be changed in the operations plan. The Steering Committee would need to consent to changing it.

- The group agreed to note the proposed changes as a footnote in the action plan and suggest that it be included in suggested changes for Operations Plan at an appropriate time when other revisions are needed; this will help avoid constant revision and approval of the Operations Plan.

A full list of the tasks considered by the breakout group is included in Appendix B.

***A Local Governments breakout group also convened and reported out the following proposed mission/purpose of the Local Governments Working Group:***

- Facilitate the development of approaches for communicating to the DLCC local government information needs for landscape-scale conservation related data and information
- Facilitate the development of approaches to communicating landscape-scale information and data to local government land use decision makers
  - Envision facilitating some case study discussions of examples of local government landscape-scale conservation actions and the related information needs
  - Facilitating discussion of local government land use decision processes that have landscape-scale effects and how to integrate landscape-scale information and data into those discussion processes
- Ultimately work with the broader DLCC community to evaluate actions to generate the optimum mechanism to inform the LCC of local government information needs and informing local governments of landscape-scale data and information important to their land use decision processes.

**Day 3 (October 12, 2012):**

**Recap of previous discussions and Finalization of Action Plan**

Following the Day 2 report outs from the breakout groups, a draft 2013 action plan was prepared by the coordinators. On Day 3, Participants reviewed the draft annual work plan. The work plan included the tasks recommended by the breakout groups plus some additional tasks that emerged from discussions and/or represented base-level activities of the Desert LCC. Please see Appendix C for the draft plan.

During discussion, the Steering Committee was asked to consider whether the draft plan was sufficient, whether there were tasks that were overlapping, whether it was overly ambitious, and/or whether some tasks should be removed/de-prioritized relative to others. The discussion is summarized below:

- It was noted that the task plan was very ambitious, but feasibility, timing, and sequencing of tasks would be hard to evaluate at this time without further refinement by the coordinators. It was suggested the coordinators further refine the plan and provide a more detailed timeline and resources to help point toward priorities and feasibility.
- Themes around science development, science communication, and science inventory appear to be a priority across all four goals. For some, there is a higher priority on science development, while for others there is a focus on other elements.
- The group discussed the need to form new task forces and working groups (see below).
- There is a need for flexibility as the LCC is still discovering its path.

**Agreements:**

- *The Steering Committee members agreed via consensus to the general direction of the DLCC 2013 action plan as described in the draft that was shared on day 3 of the meeting (see Appendix C). The plan was produced through breakout groups that provided prioritized task recommendations for each of the DLCC goal areas.*

- *The Steering Committee agreed that the Coordinators will further refine the action plan and present it back to the Steering Committee within 2 weeks.*
- *The Steering Committee specifically identified the need to establish new working groups and task forces, with the following volunteers.*
  - *Data Cataloging task force: Three months to outline process. Louise Misztal, Fon Duke, and the coordinators will work together; may also draw from existing Science and GIS/Data working group members.*
  - *Education/Outreach Working Group: John Stewart, Sonoran JV staff (Robert Mesta will provide)*
    - *State Agencies subcommittee for in-reach within state: Genevieve Johnson will give Scott Boruff a call to confirm he will lead the group.*
    - *Conservation Planning subcommittee – to provide expertise and guidance for the El Paso Conservation Cooperative*

## Communications Discussion Summary

### Strategic Communications Plan Discussion

Genevieve Johnson provided an update on the status of the DLCC Communications plan. It is a compilation of different ideas and information from other LCCs and will be finalized by the new Outreach and Education working group. Armand Gonzalez offered to have staff help with the creation of a logo. The hope is to have the plan finalized in early 2013. Genevieve asked the group to review the document for red flags and contact her via email with significant concerns.

***Action Item: Armand Gonzalez offered to have staff help with the creation of a logo.***

### DLCC website

With new regulations from the Department of Interior, it is not possible to create individual sites .org sites on Interior websites. Currently staff is working to create a DLCC website that is hosted by BOR but has a different look and feel, is LCC specific and is user friendly. It will be important to have the Communications Plan articulate how the website should be used. On a national level, it is a goal to create linkages to all LCC websites, however, a national LCC website has not yet been created. At this time, there is a BOR public affairs person in Denver who uploads content to the site (webinars, events, products from partners, etc.) and has the authority to post non-federal information.

### Identify preferred mechanisms for future coordination and communication flow(s)

The LCC could utilize a share point site for working documents. There is the possibility to create a sign-in system for Steering Committee members so that documents/information can be only viewed by the members. The Mojave Desert Ecosystem may be a good source for the group to utilize as they have a site that is assessable to the public. The group agreed a share point site would be a better alternative than email with lots of attachments. The members felt Genevieve Johnson has the authority to speak for the Steering Committee on the national level and felt it only needed to be updated on items that require a Steering Committee decision. In terms of regular updates and information sharing, Genevieve realizes the influx of emails can be overbearing but the group determined it was best to continue moving forward and have the option to delete as needed; Genevieve will label email subject lines to alert Steering Committee members to the nature of the email – e.g., decision item, update, etc.

### Agreements:

- *The Steering Committee agreed to the use of a share point site for sharing and archiving documents.*
- *The Steering Committee asked Genevieve to provide to the Committee at her discretion updates on*



***National LCC activities that she thinks the group needs to be aware of/engaged in.***

- ***The Steering Committee recommended that the coordinators include specific subject lines in emails to the Committee so they can understand the content as well as whether the email is an update, a decision item, etc.***

#### Working Group updates

To date, the coordinators have sent out updates. A member suggested the option to have updates during a conference call, so there could be interaction with working group members if needed. Mark Sogge offered the Webex application via USGS as an alternative to Live Meeting. The group agreed to have short overviews with handouts for those who want to dive deeper in to the work of a specific working group or research presentation.

#### ***Agreement:***

***The Steering Committee recommended utilizing face to face meeting time for working meetings and having short briefings on research and working groups. Working group updates and research updates can be provided on conference calls that are separate from calls focused on decision items. Briefing papers can be used for those who want to dive deeper in to the work of a specific working group or into specific research topics.***

#### **Additional Business Items**

##### Science Working Group Charter

After researching other LCC Science Working Groups and taking direction from the Steering Committee's summer calls, the charter was fleshed out to include information on adding new members, decision-making, etc. It was acknowledged that further representation for Mexico was needed as well as adding members in the Geography area. The process for reviewing the charter will be completed via email.

##### Meetings

- There will be a quarterly call in January which will include planning for the spring meeting; the Committee will discuss participation, structure, and what will be on the agenda. It will also be determined if the next meeting should be a combined meeting of Steering Committee and Science Working Group.
- There will be an in-person meeting in the spring in California. Russell Scofield and Armand Gonzalez will help coordinate.

#### **Thanks and Acknowledgements**

Throughout the meeting, several people were thanked for their hard work, dedication, and support:

- Genevieve Johnson thanked the group for their hard work and accepting the extended timeframe for the meeting.
- Fish and Wildlife Service was thanked for providing refreshments.
- Carol Beardmore and Paul Miller were thanked for their help with the Science Working Group transition to a new coordinator. It was also recognized that Paul will be moving on from DLCC and the Bureau of Reclamation.
- Thanks to Texas Parks and Wildlife for hosting the meeting and setting up the reception.



- Great thanks to Larry Voyles for all his hard work as chair of the DLCC in this challenging formative year.

**Appendix A**  
**Meeting Participants: Desert LCC Joint Steering Committee and Science Working Group Meeting**  
**October 10-12, 2012, El Paso, Texas**

\*=Participation via telephone

**Steering Committee Members and Alternates**

\*Whitney Albright, California Department of Fish and Game  
Scott Boruff, Texas Parks and Wildlife Department  
Bob Davis, USDA Forest Service  
Julie Decker, BLM-Arizona State Office  
Fon Duke, U.S. Department of Defense  
\*Armand Gonzalez, California Department of Fish and Game  
Mary Gustafson, Rio Grande Joint Venture  
\*Mike Johnson, New Mexico Office of State Engineer  
Robert Mesta, Sonoran Joint Venture  
Louise Misztal, Sky Island Alliance  
David Palumbo, Bureau of Reclamation  
Duane Pool, Rocky Mountain Bird Observatory  
\*Laura Richards, Nevada Department of Wildlife  
Dana Roth, Fish and Wildlife Service  
Russell Scofield, Desert Managers Group  
\*Mark Sogge, U.S. Geological Survey  
John Stewart, California Association of Four Wheel Drive Club  
Larry Voyles, Arizona Game and Fish Department  
William Walker, Bureau of Indian Affairs

**Science Working Group Members**

Carol Beardmore, U.S. Fish and Wildlife Service  
Deborah Finch, U.S. Forest Service  
Paul Miller, Bureau of Reclamation  
Esther Rubin, Arizona Game and Fish Department  
Lisa Soo, Bureau of Land Management  
Abe Springer, Northern Arizona University  
Jim Weigand, Bureau of Land Management

**Coordinators**

Genevieve Johnson, Bureau of Reclamation  
Aimee Roberson, Fish and Wildlife Service Science Coordinator

**Facilitators:**

Niki Koszalka, The Keystone Center  
Julie Shapiro, The Keystone Center

**Additional Attendees**

Joneen Cockman, Bureau of Land Management  
Gerry Hillier, QuadState Local Governments Authority  
Howard Hutchinson, Coalition of Arizona and New Mexico Counties  
John Kiseda, El Paso County/Dona Ana Conservation Cooperation  
Mike Landis, Bureau of Reclamation  
Rick LoBello, El Paso County/Dona Ana Conservation Cooperation  
Maggie McCaffery, U.S. Institute for Environmental Conflict Resolution  
Les Owens, New Mexico Department of Agriculture  
Daniel Pearson, U.S. Geological Survey  
Seshu Vaddey, Bureau of Reclamation

## Appendix B

### Desert Landscape Conservation Cooperative (DLCC) Joint Steering Committee and Science Working Group Meeting October 10-12, 2012

#### Breakout Groups: Task Ideas Considered

The following tables include all task ideas reviewed by the breakout groups, including those provided in the “Task Ideas” Handout and those brainstormed at the meeting.

#### Science Development and Delivery

Strategic Action/Task	Notes – from Breakout Discussions
<i>1. Identify regional and LCC-wide science needs of the Desert LCC partners</i>	
a) Conduct Science Roundtables with USGS leadership on 2-6 priority science needs identified by the Science Needs Assessment.	
b) Conduct in-country forums to meet the needs of Mexican partners.	
c) Conduct accessible forums that take into account travel restrictions to meet the needs of Tribal partners.	
d) Inform strategic science planning efforts and RFP processes of South Central and Southwest Climate Science Centers.	
<i>2. Compile a broad scale inventory of existing information that can be used to meet science needs</i>	
a) Compile list of existing partner efforts relevant to a priority science need & identify strategies for how these efforts inter-relate.	Should be based on priority needs.
b) Compile inventory of best-available science, data, and tools that address a priority science need and respond to identified management questions. Document the science/data reviewed, pros and cons of the information, and best use for the information.	Should be based on priority needs.
c) Assemble and make available a broad-scale list of documents of past and current inventories of natural and cultural resources, ecosystem stressors, priority species, and habitats (e.g., rivers and streams, springs and seeps, etc).	
d) Develop an approach for identifying sources of existing information about desired conditions of functioning landscapes/habitats in the DLCC ecosystems with the aim of producing summary documents (one ecosystem per year).	
e) Compile and prioritize cultural resource topics for investigation of climate change impacts.	
f) Complete a strategy for incorporating Traditional Ecological Knowledge into LCC planning and science needs.	

<i>3. Identify and/or develop new science products that will inform resource management needs</i>		
a) Work with resource managers to identify information they need for managing lands and natural and cultural resources including the type of media for best delivering products (e.g., webinars, on-line tools, maps).		And with the greater DLCC partnership
b) Develop a Funding Opportunity Announcement to fund non-Federal entities for applied science within the Desert LCC using information from the roundtables, etc.		
c) Use financial assistance agreements to fund Federal government entities for applied science projects within the Desert LCC using information from the roundtables, etc.		
d) Create process for ensuring best-available science, data, and tools adequately address a priority science need and are peer-reviewed and easily accessed, including review of funded DLCC projects. May include a matrix that links science specifically to research need.		
<i>4. Identify and/or develop climate change vulnerability assessments for species and ecosystems</i>		
a) Evaluate and describe the benefits and deficiencies of different existing Vulnerability Assessments.		This could be a topic for Roundtables.
b) Complete a vulnerability assessment of plant communities and ecosystems in the Sierra Madre Occidental/Sky Islands region and/or the Chihuahuan Desert region.		
c) Use existing approaches to conduct vulnerability assessments for priority species by taxonomic group or by geographic region (i.e., West-Wide Climate Risk Assessment).		(could be species other than animals, e.g., plants rather than plant communities)
<i>5. Identify and leverage the development of climate change adaptation strategies</i>		
a) Facilitate the identification and development of climate change adaptation strategies by geographic region or by ecosystem.		This could be a topic for roundtables.
b) Continue the discussion of Adaptation Strategies that was begun at the Nature Serve Sonoran-Mojave Vulnerability Assessment workshop.		
c) Facilitate partnerships to implement and test efficacy of landscape management practices on the ground for adaptation to climate change.		
d) As follow up to Science Roundtable, host workshop with on-the-ground resource managers and scientists to complete conceptual adaptive management models for science topic (i.e., Miradi or Structured Decision Making). Use information to inform strategic plan for achieving common goals in each science need.		Use FWS/USGS Structured Decision Making process.
<b><i>New Tasks Brainstormed at Meeting</i></b>		
Develop and implement a process for prioritizing science needs and information gaps identified in Comprehensive Science Needs document and from other sources		
Develop capacity and strategy for filling needs related to terrestrial ecosystems and resources (e.g., SWG could select a priority need and		

identify a project to work together on)	
Expand and make readily available downscaled bi-national climate data and projections (e.g., climate wizard expanded to south/Mexico)	
Develop fact sheets on issues in the DLCC region	
Identify future Roundtable topics based on prioritized needs	
Yearly updates on completed projects funded by DLCC w/ formal presentation to Steering Committee	
Convert science inventories into synthesis products	
Convert science inventories into a searchable database (including metadata, techniques, etc.)	
DLCC sponsored science symposium with managers (e.g., Madrean Archipelago model)	
Do comprehensive inventory of all wildland and water research currently on-going in region <ul style="list-style-type: none"> <li>○ Survey universities and colleges</li> <li>○ Relate inventory to DLCC priorities</li> </ul>	
Strategic Landscape Conservation Planning – use a scientific process to articulate clear desired outcomes for the landscape (based on biological or physical conservation targets) and plan a strategy to (1) identify gaps in science and how to address them, (2) identify how to incorporate knowledge gained into management or design (applied science, adaptive management)	

Criteria considered in prioritizing Science Development and Delivery Tasks:

- Aligns with mission, goals, scope of DLCC
- Feasible
- Relevance/applicability to management decisions
- Broad scale (both geographically and organizationally) applicability

**Collaboration and Communication**

Strategic Action/Task	Notes
<i>6. Collaborate and provide a forum for communication among partners and partner organizations</i>	
a) Create a comprehensive framework for the LCC that identifies strategic planning efforts of partners (i.e., Joint Ventures). Determine where the LCC can add value and how these efforts can contribute to an overall DLCC strategic plan, including a long-term science strategy.	
b) Create crosswalk of existing partner projects, science, and/or tools that can answer priority science needs (include Climate Science Centers).	
c) Identify shared resource objectives and terminology to promote collaboration and communication.	
d) Participate in Stakeholder Advisory Councils, as needed, for	

South Central and Southwest Climate Science Centers.		
e) Increase partnership opportunities by creating functioning Working Groups as described in the Governance document.		
f) Answer partner request by providing guidance and expertise to the El Paso/Dona Ana County Conservation Cooperative.		
g) Create SharePoint site for DLCC members to access documents, review data, etc.		
h) Identify needed data, location of data, issues with data, etc. for the DLCC.		
i) Create on-line clearinghouse for data sources and services, and access to tools to create an online environment for communication		
j) SWG to work with the GIS Working Group on developing and/or refining products such as maps, mapping tools, databases, etc. that will help managers make resource decisions. Convene a joint call to share information.		
k) Provide current results of one or more relevant (as identified through ongoing partner efforts, roundtables, etc.) programs at each of the bi-annual Steering Committee meetings.		
l) Conduct calls and meetings to complete activities.		
<i>New Tasks Brainstormed at Meeting</i>		
Collect and serve binational baseline high resolution land cover, land use, ownership, wildlife inventories, etc.		
Crosswalk similar tasks among working groups.		
Assure through feedback the extent to which Steering Committee members communicate and collaborate details of LCC activity within their organizations and regionally.		
Develop a database of landscape/resource managers who (might) have information needs that science can answer. "Identify clients."		
Query systematically landscape/resource managers about their information needs. "Market research."		
Translate managers' needs into science needs. "Product conceptualization."		
Identify partners' points of contact – the position to call/reach out to for future work or needs (e.g., which positions do we contact for data mining)		

Criteria considered in prioritizing Collaboration and Communication Tasks:

- Building block for other tasks, i.e., ID data needs
- Linkage between efforts

- Availability of infrastructure to support task
- LCC can fill a niche
- Build on past work

## Monitoring and Evaluation

Strategic Action/Task	Notes
<i>7. Incorporate current information from existing monitoring programs into Desert LCC plans and operations</i>	
a) Compile a list of existing monitoring programs that are collecting baseline data for detecting responses to climate change within the DLCC and post on the DLCC website.	
b) Identify existing monitoring programs as related to priority management questions and science needs. Identify gaps and partnership opportunities.	e.g., vulnerability assessments, compile and analyze
c) Establish an online network linking available monitoring data within the boundaries of the LCC	Talk to existing partnerships
d) Work with Barry M. Goldwater Range East biologist to promote and leverage their efforts in analyzing camera trap photo data.	Not a DLCC project
<b><i>New Tasks Brainstormed at Meeting</i></b>	
1. Compile list of existing monitoring programs and targets, protocols, etc.	
2. Identify management needs and other science needs monitoring can help answer, e.g., vulnerability assessments; compile and analyze	
3. ID gaps b/w existing programs and needs	
4. Evaluate and synthesize existing monitoring programs for sufficiency	
5. Establish on-line networks for available monitoring programs and data	
6. Identify central storage databases/websites and link to DLCC website– e.g., Gen Bank, AKN, NOAA	
7. Prioritize monitoring data gaps	
8. Convert data gaps to tasks (e.g., support, fund, etc.)	
9. Find partners and funding support for above tasks.	
Liaison with other work groups to see what monitoring needs, esp. GIS/data	
Long term data ... helpful for statistical analysis and interpretation	
Define monitoring	
Evaluate monitoring programs	
Compilation of existing monitoring needs then identify areas of overlap	
Research ways to incorporate efficacy measurements into monitoring programs	
Plan for interim/periodic review of monitoring protocols... "are the data being collected useful for analyses?"	



## Principles

- Monitoring linked to goals
- Next step from vulnerability assessments
- Informs climate change models
- Finds “alarms”
- Collaborates across programs
- Uses/supports good monitoring practices
- Includes voluntary private lands
- Supports importance of long-term monitoring
- Liaisons w/ other working groups
- Supports meta data and data standards

## Outreach and Education

Strategic Action/Task	Notes
<i>1. Develop a suite of communication tools to education resource managers and the public about the effects of climate change and adaptation strategies</i>	
a) Finalize and begin implementation of communications plan and outreach strategy.	
b) Create a vision for the Desert LCC by identifying and prioritize common performance metrics that define success for the LCC. Use accomplishments in outreach strategies.	
c) Review various communication tools such as website resources, webinars, decision support tools/systems, and other products that will best inform partners about climate change predictions and models, vulnerability assessments, adaptation strategies, etc.	
d) Sponsor webinars or other communication tools for scientists and managers on topics that the DLCC has funded.	
e) Sponsor or support webinars that communicate existing knowledge and new tools related to partner efforts and the roundtable or manager/scientist meetings.	
f) At workshops, include investigation into the type of media in which products should be delivered (e.g., webinars, on-line tools, maps).	
g) Include a requirement to host a webinar (at a minimum) in the Funding Opportunity Announcement and the Statement of Interest for awarded funds once a project is completed. Archive webinars on the DLCC website.	
h) Make new research, articles, tools, etc. available to the partnership via listserves, newsletters, webinars, website, and other media.	

i) Recommend climate change and natural and cultural resource information to be put on the DLCC website.		
j) Develop power point presentations or other communication tools for SWG or DLCC Steering committee members to use for outreach to their respective agencies about science activities of the DLCC.		
k) Develop end-of-year annual report on accomplishments.		
<b><i>New ideas brainstormed at meeting</i></b>		
Look at developing stand-alone website (not agency)		
Look at design and expansion of current website as key tool to convey information		
Develop specific outreach/education for Mexican partners		
Develop synthesis products for use in management. Raw data/studies and what this means for X resource		
Develop specific outreach/education for tribes		
Communicate existing work/projects with LCC to a broader audience		
Undertake process to determine how best to communicate existing science to resource management community		
Develop specific outreach/education for private, state, federal partners		
Develop tools to support 2-way communication (educate/inform, dialogue, encourage input)		
Look at social media tools (i.e., facebook, twitter, etc)		
Look for other partners to engage who can enhance “multiplier effect”		
DLCC can support implementation of climate change adaptation strategies by providing “political cover” for managers who are making difficult choices and taking on new activities		
Develop information on the DLCC – who we are, what we do, etc.		
Compile from communications/collaboration activities what we’ve done and how we’ve performed.		

## **Appendix C**

### **Task Ideas**

#### **DRAFT Fiscal Year 2013 Annual Work Plan Desert Landscape Conservation Cooperative [Draft date: October 3, 2012]**

#### **Mission Statement (from Governance Document)**

Through collaborative partnerships provide scientific and technical support, coordination, and communication to resource managers and the broader Desert LCC community to address climate change and other landscape-scale ecosystem stressors.

#### **Goals and Strategic Actions (from Operations Plan)**

##### Science Development and Delivery

- Identify science needs of Desert LCC partners related to climate change and ecosystem stressors at broad spatial scales.
- Facilitate the development, integration and application of scientific information (including decision support tools).
- Deliver scientific information in a timely fashion and in an accessible format for informing resource management decisions.

##### Collaboration and Communication

- Support, facilitate, promote, and add value to existing conservation partnerships.
- Enhance the capacity of these partnerships to respond to climate change and other stressors.
- Integrate scientific information into resource management planning and conservation projects.

##### Monitoring and Evaluation

- Provide expertise and opportunities to enhance and add value to existing and new monitoring programs that improve the understanding of climate change and other stressors.
- Provide coordination of data collection, data analysis, information management, and data dissemination, as requested by DLCC partners.

##### Outreach and Education

- Provide communication and application tools that inform resource managers and the public about the effects of climate change and ecosystem stressors.

The Strategic Actions are organized by the four Goal areas of the Desert LCC (i.e., Science Development and Delivery, etc.). Tasks are identified within each Goal/Strategic Action area.

	Description	Responsible Entity	Priority	Schedule	Resources
<b>Goal 1</b>	<b>Science Development and Delivery</b>				
<b>Strategic Action</b>	8. <i>Identify regional and LCC-wide science needs of the Desert LCC partners</i>				
<b>Task</b>	e) Conduct Science Roundtables with USGS leadership on 2-6 priority science needs identified by the Science Needs Assessment.	USGS	**	2013	
<b>Task</b>	f) Conduct in-country forums to meet the needs of Mexican partners.	MWG	*	2013	
<b>Task</b>	g) Conduct accessible forums that take into account travel restrictions to meet the needs of Tribal partners.	SWG	**	2014	
<b>Task</b>	h) Inform strategic science planning efforts and RFP processes of South Central and Southwest Climate Science Centers.	TWG			
		SWG			
<b>Strategic Action</b>	9. <i>Compile a broad scale inventory of existing information that can be used to meet science needs</i>	Coords			
<b>Task</b>	g) Compile list of existing partner efforts relevant to a priority science need & identify strategies for how these efforts inter-relate.				

Description		Responsible Entity	Priority	Schedule	Resources
Task	h) Compile inventory of best-available science, data, and tools that address a priority science need and respond to identified management questions. Document the science/data reviewed, pros and cons of the information, and best use for the information.	SWG			
Task	i) Assemble and make available a broad-scale list of documents of past and current inventories of natural and cultural resources, ecosystem stressors, priority species, and habitats (e.g., rivers and streams, springs and seeps, etc).	SWG			
Task	j) Develop an approach for identifying sources of existing information about desired conditions of functioning landscapes/habitats in the DLCC ecosystems with the aim of producing summary documents (one ecosystem per year).	SWG	*	2013	
Task	k) Compile and prioritize cultural resource topics for investigation of climate change impacts.	SWG			
Task	l) Complete a strategy for incorporating Traditional Ecological Knowledge into LCC planning and science needs.	TWG			
Strategic Action	10. Identify and/or develop new science products that will inform resource management needs				
Task	e) Work with resource managers identify information they need for managing lands and natural and cultural resources including the type of media for best delivering products (e.g., webinars, on-line tools, maps).	SWG			
Task	f) Develop a Funding Opportunity Announcement to fund non-Federal entities for applied science within the Desert LCC	BOR			

	Description	Responsible Entity	Priority	Schedule	Resources
Task	using information from the roundtables, etc.				
	g) Use financial assistance agreements to fund Federal government entities for applied science projects within the Desert LCC using information from the roundtables, etc.	BOR			
Task	h) Create process for ensuring best-available science, data, and tools adequately address a priority science need and are peer-reviewed and easily accessed, including review of funded DLCC projects. May include a matrix that links science specifically to research need.	SWG			
Strategic Action	11. Identify and/or develop climate change vulnerability assessments for species and ecosystems				
Task	d) Evaluate and describe the benefits and deficiencies of different existing Vulnerability Assessments.	SWG	**	2013	
Task	e) Complete a vulnerability assessment of plant communities and ecosystems in the Sierra Madre Occidental/Sky Islands region and/or the Chihuahuan Desert region.		*	2014	
Task	f) Use existing approaches to conduct vulnerability assessments for animals by taxonomic group or by geographic region (i.e, West-Wide Climate Risk Assessment).		*	2013	
Strategic Action	12. Identify and leverage the development of climate change adaptation strategies				

	Description	Responsible Entity	Priority	Schedule	Resources
<b>Task</b>	e) Facilitate the identification and development of climate change adaptation strategies by geographic region or by ecosystem.	SWG	*	2014	
<b>Task</b>	f) Continue the discussion of Adaptation Strategies that was begun at the Nature Serve Sonoran-Mojave Vulnerability Assessment workshop.				
<b>Task</b>	g) Facilitate partnerships to implement and test efficacy of landscape management practices on the ground for adaptation to climate change.				
<b>Task</b>	h) As follow up to Science Roundtable, host workshop with on-the-ground resource managers and scientists to complete conceptual adaptive management models for science topic (i.e., Miradi or Structured Decision Making). Use information to inform strategic plan for achieving common goals in each science need.	Coords			
<b>Strategic Action</b>	<i>13. Identify and leverage the development of decision support systems that would benefit partners</i>				
<b>Task</b>	a) Facilitate a webinar or other methods of communication to explain the Rapid Ecological Assessment products of the BLM to the SWG and other partners.	BLM	**	2013	
<b>Goal 2</b>	<b>Collaboration and Communication</b>				
<b>Strategic Action</b>	<i>14. Collaborate and provide a forum for communication among partners and partner organizations</i>				



Description		Responsible Entity	Priority	Schedule	Resources
<b>Task</b>	m) Create a comprehensive framework for the LCC that identifies strategic planning efforts of partners (i.e., Joint Ventures). Determine where the LCC can add value and how these efforts can contribute to an overall DLCC strategic plan, including a long-term science strategy.		**	2013	
<b>Task</b>	n) Create crosswalk of existing partner projects, science, and/or tools that can answer priority science needs (include Climate Science Centers).				
<b>Task</b>	o) Identify shared resource objectives and terminology to promote collaboration and communication.	St Com			
<b>Task</b>	p) Participate in Stakeholder Advisory Councils, as needed, for South Central and Southwest Climate Science Centers.	Coords			
<b>Task</b>	q) Increase partnership opportunities by creating functioning Working Groups as described in the Governance document.	Coords St Com			
<b>Task</b>	r) Answer partner request by providing guidance and expertise to the El Paso/Dona Ana County Conservation Cooperative.  The long range goal of the El Paso/Dona Ana County Conservation Cooperative is to develop a plan for protected areas in the region that will include large core areas of wilderness for species conservation, wildlife corridors and climate-smart management strategies that ensure viable populations of wildlife.	LGWG			
<b>Task</b>	s) Create SharePoint site for DLCC members to access documents, review data, etc.	BOR DMG			
<b>Task</b>	t) Identify needed data, location of data, issues with data, etc.	GIS			

	Description	Responsible Entity	Priority	Schedule	Resources
	for the DLCC.				
Task	u) Create on-line clearinghouse for data sources and services, and access to tools to create an online environment for communication	GIS BOR			
Task	v) SWG to work with the GIS Working Group on developing and/or refining products such as maps, mapping tools, databases, etc. that will help managers make resource decisions. Convene a joint call to share information.	SWG/GIS	* *	2013 2014	
Task	w) Provide current results of one or more relevant (as identified through ongoing partner efforts, roundtables, etc.) programs at each of the bi-annual Steering Committee meetings.				
Task	x) Conduct calls and meetings to complete activities.	Coords	** **	2013 2014	
<b>Goal 3</b>	<b>Monitoring and Evaluation</b>				
<b>Strategic Action</b>	<i>15. Incorporate current information from existing monitoring programs into Desert LCC plans and operations</i>				
Task	e) Compile a list of existing monitoring programs that are collecting baseline data for detecting responses to climate change within the DLCC and post on the DLCC website.	SWG	*	2013	
Task	f) Identify existing monitoring programs as related to priority management questions and science needs. Identify gaps and partnership opportunities.				
Task	g) Establish an online network linking available monitoring data within the boundaries of the LCC	GIS SWG			
Task	h) Work with Barry M. Goldwater Range East biologist to	GIS			

	Description	Responsible Entity	Priority	Schedule	Resources
	promote and leverage their efforts in analyzing camera trap photo data.	SWG			
<b>Goal 4</b>	<b>Outreach and Education</b>				
<b>Strategic Action</b>	<i>16. Develop a suite of communication tools to education resource managers and the public about the effects of climate change and adaptation strategies</i>				
<b>Task</b>	l) Finalize and begin implementation of communications plan and outreach strategy.	AWG		2013	
<b>Task</b>	m) Create a vision for the Desert LCC by identifying and prioritize common performance metrics that define success for the LCC. Use accomplishments in outreach strategies.				
<b>Task</b>	n) Review various communication tools such as website resources, webinars, decision support tools/systems, and other products that will best inform partners about climate change predictions and models, vulnerability assessments, adaptation strategies, etc.				
<b>Task</b>	o) Sponsor webinars or other communication tools for scientists and managers on topics that the DLCC has funded.		* **	2013 2014	
<b>Task</b>	p) Sponsor or support webinars that communicate existing knowledge and new tools related to partner efforts and the roundtable or manager/scientist meetings.				
<b>Task</b>	q) At workshops, include investigation into the type of media in which products should be delivered (e.g., webinars, on-line tools, maps).				

Description		Responsible Entity	Priority	Schedule	Resources
Task	r) Include a requirement to host a webinar (at a minimum) in the Funding Opportunity Announcement and the Statement of Interest for awarded funds once a project is completed. Archive webinars on the DLCC website.	BOR			
Task	s) Make new research, articles, tools, etc. available to the partnership via listserves, newsletters, webinars, website, and other media.		*	2014	
Task	t) Recommend climate change and natural and cultural resource information to be put on the DLCC website.	SWG			
Task	u) Develop power point presentations or other communication tools for SWG or DLCC Steering committee members to use for outreach to their respective agencies about science activities of the DLCC.		*	2013	
Task	v) Develop end-of-year annual report on accomplishments.	Coords			